

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,224	02/20/2004	Ronald F. Balingit	. 7415 EXAMINER	
75	590 04/21/2006			
Ronald F. Balingit			LAWRENCE JR, FRANK M	
6320 Meadow I Agoura Hills, (,	ART UNIT	PAPER NUMBER
			1724	
			DATE MAILED: 04/21/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		10/783,224	BALINGIT, RONALD F.	
		Examiner	Art Unit	
		Frank M. Lawrence	1724	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet w	th the correspondence a	ddress
WHIC - External after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES and time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Poeriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNION OF THIS COMMUNION OF THIS COMMUNION OF THE OF THIS COMMUNION OF THE OF THIS COMMUNICATION	CATION. reply be timely filed ITHS from the mailing date of this (BANDONED (35 U.S.C. § 133)	•
Status				
,	Responsive to communication(s) filed on This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under E	- action is non-final. ice except for formal matt		e merits is
Dispositi	on of Claims			
5)□ 6)⊠ 7)⊠ 8)□ Applicati 9)□	Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) 3 and 4 is/are withdra Claim(s) is/are allowed. Claim(s) 1,2,5 and 6 is/are rejected. Claim(s) 3 and 4 is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examiner The drawing(s) filed on 20 February 2004 is/are Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction	election requirement. : : a) accepted or b) accepted in abeyan	ice. See 37 CFR 1.85(a).	
11)	The oath or declaration is objected to by the Exa	aminer. Note the attached	Office Action or form P	TO-152.
12)[a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau see the attached detailed Office action for a list of	have been received. have been received in A ty documents have been (PCT Rule 17.2(a)).	pplication No received in this National	l Stage
2) 🔲 Notica 3) 🔯 Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	Paper No(s	ummary (PTO-413))/Mail Date Iformal Patent Application (PTo 	O-152)

Application/Control Number: 10/783,224

Art Unit: 1724

DETAILED ACTION

Page 2

Claim Objections

1. Claims 3 and 4 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to parent claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 3 and 4 not been further treated on the merits. To overcome this rejection, "1 and 2" should be changed to "1 or 2" in each claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamlin et al. (4,286,973).
- 4. Hamlin et al. '973 teach a wet gas scrubbing process comprising spraying a flow of gas with several spray nozzles (12, 14, 15, 20), directing the wet gas to cyclone separators (19) so that entrained particles and droplets are removed from the gas onto inner surfaces of the separators, and cleaning the particles and droplets from the surfaces using a flushing nozzle (26) (see figures, col. 1, line 46 to col. 2, line 11). Each cyclone has a gas inlet and outlet.
- 5. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Abdelmalek (5,466,270).
- 6. Abdelmalek '270 teaches a gas treating process comprising condensing the gas in a heat exchanger (4), conducting the gas to a cyclone separator, spraying the gas with absorbent from

Application/Control Number: 10/783,224

Art Unit: 1724

Page 3

nozzles (7c), removing moisture in the cyclone against its inner surface, and cooling the cyclone surface (see figures, col. 5, line 52 to col. 7, line 7). The cyclone has a gas inlet and outlet. It is submitted that the removal of fine particulates that pass the electrostatic precipitator will inherently take place and that the cyclone surface will be cooled to below the gas stream dew point.

- 7. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Deng (5,230,166).
- 8. Deng '166 teaches an air drying process, comprising condensing moisture in an air stream using a cooling coil (12) inside of a cyclone (20), directing entrained particles and droplets toward the inner surface of the cyclone for removal, and cooling the inner surface using the coil (see figure 2, col. 1, lines 45-63, col. 2, lines 4-44). The cyclone has a gas inlet and outlet. The cyclone surface will inherently be cooled to below the air stream dew point.
- 9. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lhota (2,527,015).
- 10. Lhota '015 teach an air washing and humidifying process comprising spraying the air with water from a reservoir and directing entrained particles and droplets toward surfaces (15, 20) within an enclosure for removal (see figures, col. 4, line 29 to col. 5, line 29).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose gas cleaning systems.

Application/Control Number: 10/783,224

Art Unit: 1724

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00. It is noted that applicant is working without the aid of a patent attorney or agent, so feel free to call the examiner with any questions.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence Primary Examiner Art Unit 1724

fl

Frank Faurence 4-6-06